REMARKS

Claims 1 and 3 to 20 are currently pending in this application. By this paper, claims 1, 3, 5-7, 9, 12-15, and 17 have been amended. Support for the amendment to claims 1, 9 and 12 can be found in paragraph 4 of the application. The amendments to remaining claims are merely clarifying in nature. Applicants respectfully request reconsideration and allowance of the claims in view of the foregoing amendments and the following remarks.

In the office action, claim 7 was rejected under 35 USC 112, second paragraph, as being indefinite. By this paper, claim 7 has been amended to increase its clarity and to eliminate an extraneous word. In particular, a semicolon has been added at the end of the hydroformylating step to indicate that that step comprises hydroformylating optionally followed by at least one step selected from the group consisting of alkoxylating, glycosylating, sulfating, phosphatizing and combinations thereof. The remaining subparagraphs in the claim are part of the initial group of processes for forming detergents. In view of this amendment, Applicants request reconsideration and withdrawal of this rejection.

Claims 1 and 3 to 20 were rejected under 35 USC 103(a) as being unpatentable over Lickus et al. (3,239,455) in view of O'Rear et al. (6,392,109). As noted by the Examiner, the present invention is directed to a process for the preparation of detergents involving separating a hydrocarbonaceous product stream from a Fischer-Tropsch process producing normally liquid and normally solid hydrocarbons into a light fraction comprising mainly C₁₈. hydrocarbons and one or more heavy fractions comprising the remaining hydrocarbons, hydrogenating at least part of the light fraction to convert unsaturated hydrocarbons and/or oxygenates into saturated hydrocarbons, distilling the product thus obtained into at least one fraction comprising detergent hydrocarbons, dehydrogenating at least part of the detergent hydrocarbons to obtain a detergent hydrocarbon stream comprising monoolefins and converting the mono-olefins into detergents. Claims 1, 9 and 12 as currently amended further indicate the detergent hydrocarbons comprise the C₁₀-C₁₇ fraction.

One of the advantages of the present invention is that a particular fraction of a Fischer-Tropsch stream is isolated and processed to obtain a maximum yield as a very pure fraction.

During the Fischer-Tropsch reaction, a number of compounds are formed. The main product stream is formed by normal paraffins. However, also oxygenates (mainly alcohols) and olefins are formed at the same time. Depending on the actual reaction conditions in the Fischer-Tropsch

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reaction section, the amounts of these "nonparaffins" may vary. The advantage is discussed in paragraph 4 of the specification.

Applicants respectfully submit that the claimed process is neither disclosed nor suggested by the cited references.

The Lickus reference is directed to a process for recovering the normal aliphatic components from a hydrocarbon mixture in which process the feedstock is pre-hydrogenated to eliminate sulfur and nitrogen-containing compounds and/or unsaturated hydrocarbons, in the separation stage of which a porous, inorganic molecular sieve sorbent is utilized as the separating agent. The Lickus reference does not teach distilling the hydrogenated product into at least one fraction comprising C₁₀-C₁₇ detergent hydrocarbons followed by dehydrogenation of at least part of those detergent hydrocarbons to obtain mono-olefins and conversion of the mono-olefins into detergents.

The O'Rear reference is directed to a process for forming alkyl benzenes which can then be sulfonated and used as detergents. In this process, fractions rich in C_{6-8} and C_{18-26} hydrocarbons are utilized. The C_{6-8} fraction is used to form aromatics and the C_{18-26} fraction is used to form olefins which are then used to alkylate the aromatics. Thus, the detergents formed by the process of O'Rear include alkyl groups containing 18-26 carbon atoms. The detergent hydrocarbons of the present invention, on the other hand, comprise C_{10-17} hydrocarbons. Thus, the O'Rear reference neither discloses nor suggests the formation of the detergents of the present invention.

As can be seen from the foregoing, the combination of the Lickus and O'Rear references do not disclose or suggest all of the elements of the claimed invention. Accordingly, Applicants respectfully submit that the invention would not have been obvious in view of these cited references.

In view of the foregoing, Applicants respectfully submit that all of the claims are now in condition for allowance and favorable consideration by the Examiner is requested. Should the Examiner find any impediment to the allowance of the claims which could be corrected by telephone interview with the undersigned, the Examiner is requested to initiate such an interview.

Respectfully submitted,

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